DATE: 30 October 1979

Dear Listener,

Thank you for your letter. We are happy to verify your report of the transmission from our External Service on:—

FREQUENCY: 15345 MHz

DATE: 22 October 1979

TIME: 0518 - 0602 GMT

Enclosed find a copy of the current Programme and Frequency Schedule. Any further information you requested will reach you by surface mail.

73s.

Yes, our transmitters are really

7,500 watts as listed!

EXTERNAL SERVICE DIVISION OF RADIO NEW ZEALAND

P.O. Box 2092

WELLINGTON

NEW ZEALAND



#### Radio New Zealand International

Thank you for your report on our transmission which we are pleased to verify.



DATE: 25 JAN 1993

FREQUENCY: 9700 kHz

Our Thompson C&F 100kw transmitter is located at Rangitaiki, east of Taupo, and is linked by microwave to our studios in Wellington, 340 kms south of Taupo.

BAY OF ISLANDS, New Zealand.

Located between Purerua Peninsula and Cape Brett, this is one of New Zealand's most beautiful and historic areas, attracting many visitors each year. Studded with over 150 islands, the Bay of Islands is famous for deep-sea fishing, with an abundance of fish such as marlin, broadbill, swordfish and several varieties of shark.





QSL Republic

11 Allanos 1997 6100 KHZ 1127-1206 yra

# RADIO NEW ZEALAND INTERNATIONAL

PO BOX 2092, WELLINGTON 6000, NEW ZEALAND TELEPHONE (64 4) 474 1437 FACSIMILE (64 4) 474 1433 E-Mail Address:-adrian@actrix.gen.nz



CRECTINGS For Kadio New Zealand Infernation

#### With Compliments

Cost frank: for your interesting report. The AM retwork !! local chitmintion which is relayed on weekends i.e. Sat a International Surday. Devalor

Gleneagles Building, The Terrace, P.O. Box 2092, Wellington Phone (04) 741-555 Telex NZ 31031 Facsimile (04) 730-185

### Our Mission

Radio New Zealand International will be a friendly, trusted voice, talking with listeners in neighbouring South Pacific countries and elsewhere about life in our country and region, the things we can offer, and the parts we can play in Pacific and world affairs.

To earn and keep the interest and respect of listeners, RNZI will -

- maintain programme and editorial policies which follow the traditions of public broadcasting, and ensure honest and impartial treatment to listeners and contributors;
- advance overseas an appreciation of the mana of New Zealand and the value placed by her people on ideals of democracy, equality and freedom;
- reflect the diverse cultures, activities and achievements of New Zealanders, acknowledging the central part played in our heritage and future by the tangata whenua;
- provide accurate and objective news and information programming, concentrating on matters of relevance to Pacific listeners, and setting in context domestic and regional reports;
- promote the attractions of our country and the quality of our products and services;
- encourage and expand links and understanding between New Zealand, her South Pacific neighbours, and the world community;
- feature wherever possible the words, songs and music of New Zealanders.

## Our Radio New Zealand International Emblem

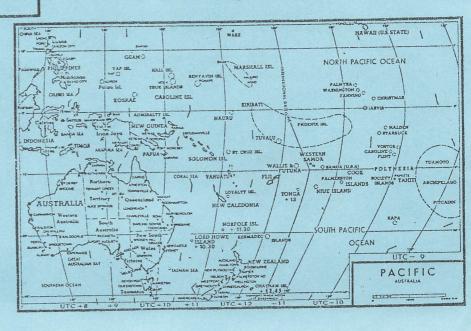
At the centre is 'Te Ika a Maui' - the fishhook with which Maui hauled the North Island of New Zealand from the ocean. Its shape echoes the 'koru' - the frond of the native punga fern, supported by fern leaves. Above it is the representation of a mountain, such as Taranaki (Mt. Egmont) or Aoraki (Mt Cook). The triangles come from compass plates used in sailing ships, and now incorporated in many Polynesian tattoos. They point towards the dots of Micronesia's atolls, protected by reefed lagoons. The wavy line at the base is like those painted on the body for Melanesian dances and 'sing-sings', representing Vanua - the land.

The overall shell shape is reminiscent of fans plaited from pandanus and coconut fibre by people all over the Pacific. The emblem was designed by Michael Tuffrey, a New Zealander of Samoan descent.



Our Pacific





### OUR TRANSMITTER

Our 100kw transmitter was manufactured by Thompson CSF of France. It is of modern electrical design and includes a state-of-theart control and telemetry system operating through a standard RS232 computer port. It is unmanned and is controlled from the Radio New Zealand Master Control room in Broadcasting House, Wellington.

The transmitter is single sideband capable and is the only transmitter offered with Dynamic Amplitude Carrier Modulation as standard. It is frequency agile, and can be tuned automatically to any frequency in the HF broadcast bands.

Dynamic Amplitude Carrier Modulation is a system designed to reduce power costs by reducing the carrier level transmitted to a

level necessary for demodulation of the received signal. A number of international broadcasters are now retro-fitting this system to older equipment to obtain power savings.

The main features of the transmitter are: high level modulation of the final RF stage due to DMP (Duration Modulated Pulses) modulation; outstanding operational flexibility due to the option of several modulation systems including SSB and AM stereo; high performance frequency slaving for 100 preset frequencies, or automatic tuning to any frequency in the broadcast bands. The transmitter is equipped with three well-tried transmitting tubes - 2 x TH581 with hypervapotron cooling and one TH581 with air cooling.

The station broadcasts 19 hours a day, and to cater for reception variations in the Pacific during the day, the frequency is changed at intervals during the broadcast period.

The transmitter is sited at Rangitaiki, 41km east of Taupo in the centre of our North Island. The transmitter coordinates are 176,25E and 38,50S.

Programmes are fed to the transmitter by microwave link from the studios in Wellington, 400 kms south of Taupo.



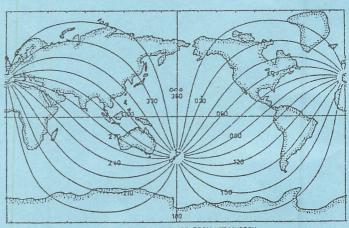
### OUR ANTENNA

The antenna system was designed in 1990 to be implemented in two stages and the second stage will be operational in mid 1993 to enable frequencies down to 6 mHz to be used. Two 9-18 mHz antennas, aimed at 325 degrees and 35 degrees true, are the present array and they can be fed either simultaneously through a power splitter or individually. Because of the time spread over the target area the 35 degree antenna is driven for the first four hours of transmission, both antennas during the day, and the 325 degree antenna for the last five hours.

The two antennas are type HR2/4/0.5 meaning they are horizontally polarised with 4 stacked, broad band dipoles, the bottom dipole being 0.5 of a wavelength above ground at the lowest band. The present antenna is designed for 6 to 18 mHz and the lobe is 70 degrees in width or 140 degrees with both antennas driven. The average angle of elevation is 10 degrees and the gain is 17 db at 9 mHz to 20 db at 17 mHz which gives an ERP of one megawatt in broad terms. The antenna is fed with 300 ohm open line feeders with a complex matching and switching system. A large reflecting mesh forms a backdrop to each antenna array and the tension on the dipoles is maintained with a system of pulleys and counterweights.

The great circle map gives some idea of the area covered by Radio New Zealand International. The 35 degree beam covers the South Eastern pacific, North America and Europe. The 325 degree beam covers the South Western Pacific, Australia, Japan and China. With the antennas combined, virtually all the Pacific Basin is covered.

Radio New Zealand International has been reported by listeners in over a hundred countries.



GREAT CIRCLE BEARINGS FROM WELLINGTON







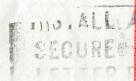
Mr Carl Mann #711 5777 Ridgeview Drive SW Cedar Rapids, IOWA 52404 UNITED STATES OF AMERICA











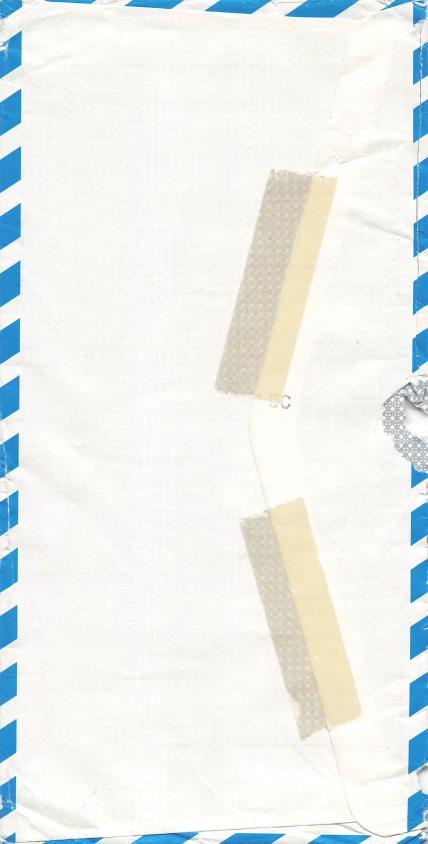


Carl Mann 6711 South 139th Avenue Circle Omaha, NEBRASKA 68137 U. S. A.



RADIO NEW ZEALAND INTERNATIONAL TE REO IRIRANGI O AOTEAROA, O TE MOANA-NUI-A-KIWA

Broadcasting House, Bowen Street, P.O. Box 2092, Wellington



### RADIO NEW ZEALAND INTERNATIONAL



TE REO IRIRANGI O AOTEAROA O TE MOANA-NUI-A-KIWA

PO BOX 123 WELLINGTON